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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/784,180	02/24/2004	Sachiko Terai	826.1926	1134

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EXAMINER	
HASSAN, AURANGZEB	

ART UNIT	PAPER NUMBER
2182	

DATE MAILED: 05/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/784,180	TERAI ET AL.	
	Examiner	Art Unit	
	Aurangzeb Hassan	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 February 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *24 February 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6/11/04 & 8/2/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1 – 22 are rejected under 35 U.S.C. 102(e) as being anticipated by Taninaka et al. (US Patent Number 6,886,054 hereinafter "Taninaka").

3. As per claims 1, 9 – 12, and 20 – 22, Taninaka teaches an apparatus and computer readable medium for supporting a configuration of a storage system including an upper level device with at lease one port (plurality of ports in host, element 10, figure 1), an input/output device with at least one port (plurality of ports and devices represented in first and second storage devices, elements 30 and 40, figure 1) and a path control device provided between the upper level device and the input/output device (Fibre Channel switch, element 20, figure 1), comprising: a first information acquisition unit which acquires information about the upper level device, the input/output device and the path control device (processor within the switch acquires the information, element 23, column 6, lines 51 – 65); a second information acquisition unit which acquires information about a physical connection among the upper level device, the

input/output device and the path control device (memory within the switch stores the correspondence for the Fibre Channel, element 22, figure 1); a path information generation unit which generates path information about a logical path to be established between the upper level device and the input/output device through the path control device based on the information acquired by said first and the second information acquisition units (logical device path, element 640, figure 6, column 9, lines 6 – 21); an instruction preparation unit (management server controlling the switch, element 50, figures 8 & 9) which prepares instruction to control conditions of the upper level device (stored in management server table, element 700, figure 8), the input/output device and the path control device based on the path information generated by said path information generation unit (management server updates the management server table and generates transfer instructions for switch, column 12, lines 2 –24) ; and a transmission unit (management server further routes instructions to the host computer and logical devices via the switch, column 12, 25 – 54) which transmits the instruction prepared by said instruction preparation unit to the upper level device (host, column 12, lines 41 – 53), the input/output device (logical devices, column 12, lines 34 – 40) and the path control device (switch, column 12, lines 25 – 33).

4. As per claims 2 and 13, Taninaka teaches an apparatus and computer readable medium comprising an allocation unit which allocates temporary port information to respective ports provided in the upper level device and the input/output device, wherein said path information generation unit generates the path information using the

temporary port information (in the switch a temporary connection port management table is formed to allow for correspondence between the upper level device and the I/O device through the switch, element 400, figure 4, column 8, lines 12 – 19) .

5. As per claims 3 and 14, Taninaka teaches an apparatus and computer readable medium comprising an inquiry unit which inquires port information of respective ports provided in an upper level device and an input/output device provided in an actually configured storage system, wherein said path information generation unit replaces the temporary port information being used in the previously prepared path information with actual port information obtained by the inquiry (when destination address with the transfer-target address defined they are stored in the data transfer management table, element 500, figure 5, column 8, lines 20 – 33).

6. As per claims 4, 5, 15, and 16, Taninaka teaches an apparatus and computer readable medium wherein said path information generation unit detects a logical path that can be established between the upper level device and the input/output device based on the information acquired by said first and the second information acquisition units and generates path information (logical device management table, element 600, figure 6, corresponds to path information for the switch, connection port and the logical device, column 9, lines 6 – 13); and said instruction preparation unit prepares an instruction to establish the detected logical path (logical device path establishes all the detected logical paths, element 640, figure 6).

7. As per claims 6 and 17, Taninaka teaches an apparatus and computer readable medium comprising a third information acquisition unit which acquires information that is related to a virtual data area to be prepared in the upper level device (management server table accessible by the host computer as well as the management server, element 700, figure 7), wherein said instruction preparation unit prepares an instruction to secure a data area corresponding to the virtual data area in the input/output device (the table 700, provides set port address for the switch and connection ports, column 9, lines 51 – 64).

8. As per claims 7 and 18, Taninaka teaches an apparatus and computer readable medium wherein said instruction preparation unit prepares instructions to establish a logical path between an upper level device where the virtual data area should be prepared and an input/output device where the corresponding data area should be secured (already set in the management table 700, the management server checks validity to ensure data are secured for logical device appropriately assigned, column 10, lines 46 – 65).

9. As per claims 8 and 19, Taninaka teaches an apparatus and computer readable medium wherein said first and second information acquisition units provide interfaces allowing a user to input information (the management server, element 50, figures 8 & 9, has a user interface, column 4, lines 11 – 15).

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aurangzeb Hassan whose telephone number is (571) 272-8625. The examiner can normally be reached on Monday - Friday 9 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Huynh can be reached on (571)272-4147. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AH
5/2/2006

KIM HUYNH
SUPERVISORY PATENT EXAMINER
5/9/06